Project Assistance Completion Report (PACR)

NON-TRADITIONAL AGRICULTURAL EXPORT SUPPORT PROJECT

(PROEXAG)

(Project Number 596-0108)

Regional Office for Central America and Panama (ROCAP)
U.S. Agency for International Development
Guatemala City, Guatemala

Guatemala City, Guatemala

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EXECUTIVE SUMMARY

The NTAE Support Project (596-0108) was signed in September 1986. During the first months of the project inception the name "PROEXAG" was created to represent the contract team. From October 1986 through September 1991, PROEXAG provided technical assistance to the Central American NTAE industry and created and filled a niche in the expansion of Central America's foreign exchange earning capacity, a critical element in the region's long-term economic growth prospects. Through a skillful, energetic and well-targeted campaign of promotion and technical assistance, PROEXAG introduced new crops, new methods, new growers, new exporters and new markets. The general consensus is that PROEXAG provided substantial impetus to the impressive growth in non-traditional exports over this period.

Despite the chaotic condition of economies throughout Central America and the political buffeting all regional efforts have taken, production and export of non-traditional crops rose in PROEXAG's original four participating countries (Guatemala, Honduras, Costa Rica and El Salvador). After the first four years, production and export sales were steadily higher in these countries, and the trends and prospects appear promising. Panama, Nicaragua and to some extent, Belize were incorporated into the project in the latter years. The longer PROEXAG has run, the greater seem to have been its benefits.

From the beginning the technical assistance was targeted at members of the export federations and export-oriented development foundations that had been designated as formal counterparts to PROEXAG:

- In Guatemala, the Guild of Nontraditional Products Exporters (GEXPRONT)

- In El Salvador, the Salvadoran Association of Nontraditional Producers and Exporters (ASPENT), which was later transformed into the Agricultural Diversification Division (DIVAGRO) of the Salvadoran Foundation for Economic and Social Development (FUSADES)

- In Costa Rica, the Private Agricultural and Agroindustrial Council (CAAP), which was later changed to the Agricultural Division (DIVAGRI) of the Coalition of National Development Initiatives (CINDE)

- In Honduras, the Federation of Agricultural and Agroindustrial Producer and Exporter Associations (FEPROEXAAH), subsequently simply "FPX"

- In Panama, first the National Council for Productivity (CONDEPRO), (which never really got started and eventually folded once AID withdrew from Panama) and from 1990 onward, the Guild of Nontraditional Exporters of Panama (GREXPAN)

- In Belize, Belize Agribusiness Company (BABCO)

- In Nicaragua from 1990 onward, the Nicaraguan Association of Producers and Exporters on Nontraditional Products (APENN)

During the first year of PROEXAG, short-term consulting assistance was also in support of mariculture (e.g., shrimp farming) and aquaculture (e.g., tilapia, catfish, and trout farming) activities in several countries, but it was soon decided not to accept further requests for assistance in these areas. Again, the main reasons were that the core team was not familiar with these businesses, more specialized sources of technical assistance were available, and separate bilateral projects were being developed within or for several counterpart entities to address these areas.

By the end of the first year, PROEXAG's product focus had narrowed to horticulture. Within horticulture, however, there are many segments, numerous crops, and various product forms for each crop, so further prioritization was necessary.

The major segments of horticulture are: (1) fruits, vegetables and their derivative products; (2) ornamental crops and their derivative products; (3) specialty crops and their derivative products; and (4) propagative materials. The latter segment was immediately discarded (except as an adjunct to other export businesses--a pineapple nursery, for example) because such businesses are very specialized and do not usually generate large export volumes. The specialty crop segment was also discarded because the industrial crops within it each have unique marketing systems and because specialty edible crops such as herbs and spices typically generate only small volumes.

One of the important notions to come from the project was the "deal making" concept, which was the corner stone of the project even though the players varied as products, shippers and markets change. The contract provided the "know how" through direct technical assistance, training, and market information. The delivery methods for providing this "know how" and the recipients were the focus of this project, and provided the foundation for the philosophy behind the follow on EXITOS project.

TABLE OF CONTENTS

LIST OF ACRONYMS

APENN	Nicaraguan Association of Producers and Exporters of Non-Traditional Products
APHIS	Animal Plant Health Inspection Service
ARS	Agricultural Research Service
ASPENT	Salvadoran Association of Non-Traditional Producers and Exporters
BABCO	Belize Agri-Business Company
CAAP	Private Agricultural and Agroindustrial Council
CBI	Caribbean Basin Initiative
CINDE	Costa Rican Coalition for Development Initiatives
CONDEPRO	National Council for Productivity
CPD	Commodity Price Database
DIVAGRI	Agricultural Division (CINDE)
DIVAGRO	Agricultural Diversification Division
EAP	Panamerican Agriculture College (ZAMORANO)
EBDC	Ethylene Bis-dithio Carbamate (Fungicide previously used on vegetables)
EPA	Environmental Protection Agency
EXITOS	Export Industry Technology Support
FDA	Food and Drug Administration
FPX	Federation of Associations of Agricultural and Agricultural and

FUSADES	Foundation for the Economic and Social Developmento of El Salvador/Agricultural Diversification Division.
GEXPRONT	Guild of Exporters of Non-Traditional Product s of Guatemala
GREXPAN	Guild of Exporters of Non-Traditional Crops of Panama
IPM	Integrated Pest Management
NAFTA	North American Free Trade Agreement
NTAE	Non-Traditional Agricultural Export
PASA	Participating Agency Service Agreement
PROEXAG	Non-Traditional Agricultural Export Support
ROCAP	Regional Office for Central American Programs
USAID	United States Agency for International Development
USDA	United States Department of Agriculture
USDA/AMS/MNS	Market News Service

PROJECT ASSISTANCE COMPLETION REPORT

1.0 PROJECT OVERVIEW

PROEXAG had its origins in three inter-related sets of circumstances: (1) the failure within Central America during the late 1970's and early 1980's of economic development strategies adopted in earlier years; (2) the promulgation by the United States of policies and legislation that aimed to promote export-led growth in Central American countries and elsewhere; and (3) major shifts in supply and demand patterns for horticultural products in markets potentially accessible to Central American producers.

In 1982 the United States responded to the deteriorating economic situation in Central America and the Caribbean with the Caribbean Basin Initiative (CBI), whose intent was to promote trade, aid and investment. The U.S. Agency for International Development sought to reinforce and help realize these objectives by allocating substantial foreign aid resources to most bilateral and regional programs aimed at encouraging macro-economic reform, creating a positive export environment, establishing appropriate support institutions, and ensuring that interested businesses had access to whatever financial and technical assistance they needed to penetrate new markets.

Since there were various sectors in which the CBI countries could theoretically be competitive--e.g., textiles, garments, electronics, light industry, horticulture--and each sector was complex, it became evident early that mechanisms had to be developed to capture and make available scarce expertise in the most promising sectors in a cost-effective way. PROEXAG was designed to serve as such a mechanism for the horticultural export sector in Central America.

Even before the PROEXAG project was designed in early 1986, high-value horticultural products had been identified as a most promising sector for attention under the CBI Initiative: per capita consumption of horticultural products was rising in the U.S.; population growth was leading to an increase in total consumption of horticultural products; supermarkets had begun to realize that horticultural products are among their most profitable products, and were exerting pressure to obtain year-round supplies of consistent quantity and quality; domestic producers were looking to expand their supply to reduce seasonality and maintain client relationships; horticulture would make good use of some of Central America's, most important natural endowments--land, soils and climate; and horticulture is generally labor-intensive and has a high local value-added.

1.1 PROJECT STATUS

1.1.1 Project Goal

The goal of the Non-traditional Agricultural Export Support (NTAES) Project, which came to be more commonly known as PROEXAG, was defined in the Project Paper as follows: **"to contribute to long-term economic growth through the expansion of nontraditional agricultural exports from Central America and Panama."**

1.1.2 Project Purpose

At the purpose level, the objective was to:

"Create and/or strengthen private sector capabilities in the provision of hands-on training and technical assistance in skills related to production technologies and market intelligence for nontraditional agricultural exports."

The project purpose was met, and as important carried on into the follow on project, EXITOS: "increase the sales and/or volumes of Central American non-traditional exports. ...through targeted interventions that will improve NTAE promotional institutions, Central American corporations involved in NTAE exports and commodities, and the businessmen who are the backbone of this subsector in Central America."

Some of the indicators taken from the last Semi annual review are: Seventy-three professional staff members from all participating export federations were trained in computer operation and a variety of software applications from basic word processing programs to more complicated commodity price database monitoring. Two hundred and twenty-nine technical assistance courses in a wide range of specific topics were given. Six new non-traditional agricultural products that received substantial project assistance (berries, asparagus, etc.) achieve commercially viable export volumes. Through direct project involvement and in close coordination with other regional and international entities, twelve new transport routes and ports were opened to Central American producers. Ten key production and post-harvest technologies were introduced and accepted by Central American producer exporters. Fourteen new viable NTAE crops associations were formed within the region as a result of project intervention. Seventy three new viable produce deals (i.e., a combination of grower/ product/receiver) were established by introducing new foreign buyers to the region as well Central American producers to new markets or commodities. These "deals" amounted to an increase in over $35 million in new export ventures that can be directly attributed to the project from new production techniques, new crops, new

markets, and new "players". Through the Commodity Price Database System (a computerized market price system developed by project experts and unique in the world) printouts are available for over 70 commodities including fruits, vegetables and flowers. The final version of the updated EPA pesticide bulletins was updated, published and disseminated throughout the region. The technology for preparing these reports and training was given to CATIE staff in order to maintain continuity on a regional basis.

2.0 CONTRIBUTION SUMMARY

2.1 Funding

The Non-traditional Agricultural Export Support Project was initially funded to a maximum level of $8.0 million, to be expended over a five-year project spanning the period from July 1, 1986 to June 30, 1991. In June of 1990, in recognition of the re-establishment of diplomatic relations with both Panama and Nicaragua and their subsequent reincorporation into the USAID/ROCAP mandate, an amendment to the project paper was signed that increased available funding to $9.0 million, and extended the Project Activities Completion Date to September 30, 1991. The entire amount budgeted for the Chemonics contract, $8,186,254 was liquidated.

Total funding (LOP)	$9,000,000.00
Total amount obligated	8,748,683.00
Total amount disbursed	8,650,946.00
Pipeline	97,737.00

As of 9/30/92

Over and above the Chemonics contract, funds available under this project were used to cover the costs of: (1) contracting a Project Liaison Officer for a period of approximately three years; (2) conducting a mid-project evaluation; (3) contracting for the design, validation and initial replication of a course on rational pesticide use; (4) funding a PASA agreement with USDA/OICD to organize a regional seminar on medfly control technologies and the travel of FDA and EPA officials; (5) financing one-third of the cost of the Miami Reporting Office of USDA's Market News Service; and (6) selected other small activities.

Within the project paper was the inclusion of counterpart funding of $1,590,000 that contemplated counterpart personnel, training activities, computer information activities and short term assistance, however, counterpart funding was not included in the contract agreement. Accurate accounting was not done during

this project. During the first year of the project and confirmed by the evaluation it was determined that none of the counterpart organization had the funding to provide personnel ("clones") to the project advisors. Computer equipment far in excess of that considered was purchased, and corollary and follow up training activities were carried out by counterpart organizations. A very common practice used by the organizations was to contract short term assistance and trainers originally brought in by PROEXAG to provide further assistance on an exclusive basis either directly to producers or to the organization staff.

2.2 Personnel Provided

Under the Chemonics prime contract and associated subcontracts, a total of 300 person-months of long-term effort was actually provided over a sixty-month period. Key personnel assigned to post in Guatemala included: (1) a Team Leader for 58 person-months in all; (2) a Computer Utilization and Information Specialist for 57 person-months; (3) a Marketing Specialist for 48 person-months; (4) a Post-harvest Specialist for 56 person-months; (5) a Production Specialist for 55 person-months; and (6) a Training Specialist for 26 person-months. In addition, Chemonics and its two subcontractors provided more than 250 person-months of professional short-term effort through a combination of home office staff, expatriate and Central American experts hired on an intermittent basis for specific assignments, and technical assistants hired within Guatemala as internal counterparts to the resident advisory team.

2.3 Pilot Projects in Agricultural Research

The project also funded about $75,000 worth of applied agricultural research. Most of the funds were applied to the procurement of planting material used to test the adaptability of different cultivars of priority crops but some funding was devoted to melon virus research, use of modified atmosphere technology, and alternative packaging.

2.4 Training

About $360,000 were spent on activities formally classified as training. These included: more than 100 seminars, workshops and field days formally organized by PROEXAG; some 15 regional conferences on different themes; participation by the PROEXAG team and selected counterparts at industry conferences; design and pilot testing of new short courses; development of audiovisual and other training materials; and about 15 observational tours to the U.S., Europe, and Chile.

3.0 DESCRIPTION OF PROJECT ACTIVITIES AND MAJOR ACCOMPLISHMENTS

As the project evolved certain key areas were given the most attention. These areas were based either on priority crops or on priority themes. In all cases, assistance was provided in disciplines from production to marketing. The following is a break down of some of the major accomplishments:

3.1 Major Accomplishments by Crops

ASPARAGUS

Introduced several new, high-yielding cultivars to Guatemala, Costa Rica, Honduras, El Salvador and Panama, and designed, established and monitored adaptation trials for these cultivars in five countries under varying agroecological conditions. Organized, sponsored and carried out two asparagus production and marketing tours for some twenty five persons to sites in the U.S. Compiled an asparagus information packet based on the most appropriate and technically sound literature available. Played the principal promoter and facilitator role in the growth of the asparagus industry to an estimated 500 hectares of commercially viable acreage, most of them in Guatemala.

CANTALOUPE

Designed, conducted and monitored a pilot program in melon production in Guanacaste Province of Costa Rica that ultimately led to the establishment of Costa Rica as the major melon producer in Central America. Disseminated to a broad audience of growers the stylet oil treatment for controlling aphid-borne virosis in melons. Provided guidance to producers throughout Central America in proper selection, packing and quality control, especially against salmonella, cholera and other microbacteriological contaminants.

SEEDLESS WATERMELON

Promoted Sun World International's coming to Central America to test its proprietary variety of seedless watermelon with growers in Guatemala, Honduras and El Salvador. Nurtured the seedless watermelon deal until it had become commercially viable in at least one of the three countries, resulting in sales from Honduras during the 1990/91 season of at least $1.5 million.

BLACKBERRIES AND RASPBERRIES

Introduced promising cultivars to Guatemala, Costa Rica, Honduras, Panama and Nicaragua. Designed, sponsored and monitored variety trials under varying agroecological conditions and management regimes in those countries. Developed and later refined a cultivar/nursery source guide for blackberries. Developed a comprehensive but practical production guide for blackberries in Central America. Provided trouble-shooting in production, post-harvest handling and marketing to make sure the new industry became well-established.

MANGOS

Conducted applied research on flower induction on different mango varieties using varying combinations of cultural practices and growth regulators successfully utilized in the Philippines to aim production at the most profitable market windows. Monitored the ARS-controlled research process and APHIS-controlled regulatory process used to test and approve the hot water and other treatments for application on mangos destined to the U.S. market; then worked to clarify and disseminate information concerning the approval process, and facilitate actual use of the hot water treatment.

SNOWPEAS

Made a substantial effort to clarify EPA regulations concerning agrochemicals permitted for use on snowpeas destined for the U.S., then worked closely with FDA, the snowpea growers' subcommittee, and GEXPRONT to improve pesticide use, meet EPA/FDA regulations, and develop alternative means of pest/disease control.

COLORED CALLAS LILIES

Designed, organized and carried out adaptation trials for new cultivars imported from New Zealand. Provided initial technical assistance as well as on-going monitoring to ensure that this crop reached commercial viability, resulting in the first export shipments out of Guatemala to the U.S. and self-financed expansion by two growers.

3.2 Major Accomplishments By Theme

OPTIMAL VARIETAL SELECTION

PROEXAG devoted significant effort to introducing and testing improved cultivars of asparagus, red raspberries and blackberries for their adaptability to different growing conditions within Central America and for their apparent commercial promise. PROEXAG also introduced improved cultivars of various other crops: heliconias, flowering gingers, boronias, calatheas, proteas, and colored callas.

In the case of colored callas, the PROEXAG introductions were a rapid success--saleable at high prices in the local market in Guatemala and readily exportable to the United States. In its last year, PROEXAG introduced the first cultivars of edomame, a type of soybean that is harvested immature, processed through freezing and then shipped to Japan where it is consumed as a snack to accompany alcoholic beverages. After identifying the most promising varieties available from Taiwan, the project obtained seed for trials. Initial results were favorable enough to cause the Japanese trading company Nissho Iwai and the supermarket chain Seiyu to send their buyers to Guatemala in December 1991 and at least one grower--a freezing company--is already moving into commercial production.

APPROPRIATE USAGE OF AGROCHEMICAL AND BIOLOGICAL INPUTS

Starting in about 1988, agrochemical usage was becoming a very important issue--first for environmentalists and consumer advocates, then for regulatory agencies and finally for consumers themselves. As interest rose within the worldwide horticultural industry, it became clear that continued growth in non-traditional agriculture from Central America depended on more rational and controlled use of agrochemicals, both in production and post-harvest handling.

PROEXAG took the lead in this field first by creating a series of bilingual bulletins that listed all agrochemicals registered by EPA for use on some 16 crop groups of interest to Central America. This was the start of a major effort that continued through the life of the project, and included: (1) a systematic effort to monitor, compile and disseminate information on the changing regulations and procedures of EPA, FDA and similar authorities in Canada, Japan and the major European countries; (2) financing through EAP Zamorano the design, pilot testing and initial delivery of a 1-2 week course on rational pesticide usage aimed at extension agents, foremen, agrochemical representatives and field applicators; (3) logistical support for visits by EPA and FDA authorities; (4) cooperation with

researchers on IPM and other pest/disease control systems aimed at improving usage of chemicals; and (5) support for efforts by the local agrochemical industry to police itself.

IMPROVED DISSEMINATION OF REGULATORY INFORMATION

Throughout the project, members of the team systematically monitored, compiled, and disseminated to interested grower/shippers a wealth of technological and regulatory information concerning post-harvest handling. Key topics that were tracked included: changes in FDA labelling requirements (e.g. country of origin, nutrition, use of waxes); changes in allowable fumigants at port of entry (e.g. EDB, methyl bromide); the use of differentially permeable films for packaging; and new techniques or applications of modified and controlled atmosphere technology.

PROEXAG also made repeated attempts to expand the list of crops admissible from Central America to the U.S.; unfortunately, efforts were unsuccessful because APHIS chose not to run new enterability proposals through the approval process on an individual basis, but rather to accumulate them in a "delayed list."

VIRUS CONTROL

As melons (honeydews, cantaloupes and specialty melons) continued to rise in export volume over the life of PROEXAG, reaching more than $35 million in value in 1990, the costs and potential risks associated with virus infestation in melons also rose. The first step was to convince the sponsor and developer of a promising control technology for aphids--that were thought at the time to be the only vector--to make their stylet oil-based technology widely available.

However, as the problem continued to grow, the second step was to expand a pilot research effort on virus epidemiology being undertaken by the University of California at Riverside under FUSADES' auspices in El Salvador, so that the same research could be done all across the region. The results indicated that not just one viral group was involved but as many as seven, and that not just aphids but also whiteflies were serving as vectors.

INCREASED FREIGHT CAPACITY FROM THE REGION TO THE U.S.

During PROEXAG's earlier years, grower/shippers were very concerned about the shortage of refrigerated containers during the peak NTAE season. In response to this problem, PROEXAG designed and carried out a survey of planned area to be planted by melon growers (the principal users of these containers), and then updated it in successive months as actual plantings, weather patterns and shipping decisions evolved. Another method of alleviating the shortage and

exerting downward pressure on rates was to seek the entry of new carriers. Finally, a third method of alleviating the transport shortage (while also diversifying ports of exit and entry) was to encourage the multinational banana companies to carry perishable cargo on deck.

ACHIEVEMENT OF ROUTINE MEXICAN OVERLAND TRANSPORT

In its early years, PROEXAG also worked closely with an entrepreneur in Guatemala to get the first commercial overland transport service to the U.S. through Mexico started. Although volumes never grew as well as expected, mainly because of relative costs, the service still exists now and is used by some exporters in Guatemala, El Salvador, Honduras and Nicaragua. The same carrier also serves Mexico City and Cancun, which are becoming more interesting as the Mexican market expands and prospers and as NAFTA approaches.

INCREASE MARKETING SOPHISTICATION AMONG SHIPPERS

Overview seminars on NTAE opportunities in the U.S., Canada, and Europe were held at least several times in each country, with differing audiences each time. Market-specific seminars on each of these target markets were also held repeatedly. Segment-specific seminars or presentations were made over and over again for fresh produce, processed produce, and cut flowers. Crop-specific seminars and talks were held in all countries for the highest priority crops for that country. In addition, orientation tours were held in the U.S. for actual or prospective growers of asparagus, cut flowers, brambleberries, melons and seedless watermelon. Finally, to complement these training activities, the PROEXAG office collected and disseminated on a continual basis myriad articles, papers, reports and studies written on the structure of the horticultural sector, changes in consumer preferences, marketing and merchandising practices, and trends in supply and demand.

ENHANCED ACCESS TO TIMELY MARKET INFORMATION

PROEXAG placed great emphasis on improving access to timely market information on the part of growers, grower/shippers, exporters, analysts and export promotion personnel. The project's first action in this regard was to co-finance the establishment and operation of a Miami office of the Market News Service of USDA's Agricultural Marketing Service so that it could provide daily reports throughout the winter season on products of interest to the CBI countries. The back-up response was to design a Commodity Price Database (CPD) into which daily price reports from USDA/AMS/MNS could be inputted to create an historical record of prices for some 20 different commodities in key markets within the U.S. The CPD allows for selective retrieval against many different descriptors and also enables users to customize reports. These initiatives not withstanding, in

the end PROEXAG kept coming back to the conclusion that faxed reports, phone inquiries, and direct contact between buyer and seller remain the best sources of timely, accurate and useful marketing data.

DIVERSIFICATION/UPGRADING OF RECEIVERS

Throughout the project, the PROEXAG marketing staff also sought to continuously upgrade, and when appropriate to diversify, receivers of NTAE products. Over time, this led to a "recommended" list, which in no case included less than three receivers of a particular product and which was used very selectively. PROEXAG also took a more pro-active stance with the most promising and reputable receivers. Whenever such companies expressed interest in sourcing from the region for the first time, or expressed interest in diversifying suppliers, source countries or commodities, PROEXAG would offer them substantial support and facilitation. The first step was usually to develop a short list of potential suppliers, directly handle initial exploratory contacts, then arrange an itinerary of field visits in which the PROEXAG team would usually participate.

DIVERSIFICATION OF GEOGRAPHIC MARKETS

Throughout the project, the PROEXAG team concentrated on the U.S. market because of its size and nearness to Central America, and because within that market there was ample room for diversification of receivers and end-users, and also for increasing income and/or lowering risk. PROEXAG also set up a mechanism for exploring and pursuing opportunities in Europe by contracting with an agent to represent the team in Europe. His activities included: (1) scoping out new marketing possibilities; (2) identifying and pre-qualifying receivers; (3) examining quality and condition of arrivals; (4) trouble-shooting; and (5) monitoring and reporting on changing trends.

IDENTIFICATION AND PURSUIT OF NICHE AND SPECIALTY MARKETS

PROEXAG's main activities in this area included: (1) exploration, analysis and consciousness-raising about organically-grown crops; (2) limited commercial trials with several specialty cut flowers (e.g. proteas, colored callas) and specialty vegetables (e.g. bitter melon, edomame, sugarsnap peas); and (3) information collection and preliminary analysis of the feasibility of promoting exotic fruits (e.g. rambutan, lychee, langson, mangosteen, pitahaya) during a second-phase project.

4.0 PROJECT MONITORING AND EVALUATION

During 1988, a "collaborative evaluation" was carried out on the NTAE project. The evaluation was in two parts: an initial information gathering visit to all

countries to interview PROEXAG clients, a staff meeting with the evaluators to go over the findings, and a subsequent follow up evaluation six months later to verify the recommendations. No substantial changes were made in project design as a result of the evaluation, but there was clarification on certain terms used in the project and their interpretation by the team: "deal-making," channel captains, priority crops, etc. The final report of the project also contains sections on self evaluation.

This same evaluation stated that "The continued improvement in PROEXAG's performance, value, and impact is well recognized and reported throughout its user community. The sincerity, emotional tone and uniformity of positive response left the evaluator with the impression that PROEXAG now ranks among the finest development projects these respondents have ever experienced. Confidence, successful results of work accomplished, and fondness for PROEXAG and its short-term consultants were communicated strongly throughout the data. Overall, PROEXAG is seen as an excellent resource that federations and growers can't get enough of. PROEXAG is a principal source of practical, high level and timely consulting advice available to growers in the region. The full-time PROEXAG staff, backed up by what is unanimously perceived by growers, Agricultural Federations, and USAID personnel as a team of excellent short-term specialists, has had a highly visible impact on pre-takeoff stage ventures and active agricultural export ventures throughout the region."

The evaluation also pointed out that, "there are several reasons why the success of the PROEXAG model may be difficult to duplicate. One such factor is the unique quality of the PROEXAG staff, who possess qualities that are scarce resources in the development marketplace. It may not be possible to staff another project with the same 'punch'. The regional nature of this ROCAP project is another feature that may not be appropriate outside Central America. It may also be hard to recreate the combination of language capabilities, deep cultural knowledge, professional experience, and access to industry leaders and technical information of the PROEXAG team, their own effective group dynamics, and the talent represented within the group of ROCAP officials who have overall responsibility for project management. For these reasons, care should be taken in deriving lessons from the PROEXAG model."

However, the success of the PROEXAG project led to a follow on project called EXITOS (implemented by Chemonics, International and composed of basically the same team members as in NTAE project) that built directly on the lessons learned under the NTAE project. The EXITOS contract team has reflected this by calling themselves PROEXAG II.

5.0 LESSONS LEARNED

One of the reasons for the success of the PROEXAG projects was the calibre of people who worked on the core team. Although there were four distinct areas covered: production, post harvest, marketing and information management, all team members crossed into the disciplines of the others. Dividing the areas of responsibility into priority crops and priority themes and having each team member responsible for a certain area including all disciplines provided a continuity and follow through that was important in providing assistance.

The concept of the "deal" as the focus of project support was an important concept to direct assistance either concentrating on the whole deal e.g., Guanacaste melons, or just a deficiency in the deal, e.g. finding a buyer for snow peas in New York.

The use of short term experts evolved into an important concept for the follow on EXITOS project. The long term resident experts would decide on the areas that they needed more specific help and "recurrent" short term experts would be found who would assist the long term experts. If very specific problems arose, a short term expert would be brought in for a one time visit. For example, the resident experts determined that blackberries could be produced in Central America: there was adequate packing materials and transportation and a market. After the preliminary work was done to determine where they could be planted, a "blackberry" expert from Louisiana was hired who made numerous visits to the region throughout the life of the project. However, when he needed more assistance on blackberry diseases another specialist was found to assist him. All the work was coordinated and supervised by the long term resident advisor.

This procedure for providing assistance was found to be very effective. It should also be mentioned that the level of short term experts hired were almost without exception - world class experts: the colored calla lily expert from New Zealand, the melon mosaic virus expert form Cal Davis, etc. This added much to the credibility of the project.

The project paper called for counterpart long term experts in each of the federations in effect a "clone" of the resident expert. However, for a variety of reasons, this concept was impossible to implement, so each PROEXAG expert had a Central America professional to assist him, and as important to learn from the long term expert. This concept of training local professionals was another important milestone in project implementation.

The ability of the project to find and hire short termers or to provide long term experts to the bilateral mission project in a relatively short amount of time was also a major reason for project success.

Growth in the NTAE subsector as a whole depends above all on the establishment of viable NTAE-oriented businesses, and although the establishment of appropriately conceived NTAE support institutions can help catalyze, accelerate or guide the natural evolution of the NTAE subsector, long-term sustainability in the subsector depends on the viability of NTAE enterprises themselves. Although support institutions can induce development, they cannot be and should not be the primary motor force; in the end, if the businesses are not profitable, such institutions will wither away when external funding is exhausted.

Non-traditional agricultural export businesses are high-risk ventures because they: (1) usually involve relatively new crops that require unproven technology and considerable local adaptation; (2) are subject to unpredictable weather and ever increasing pest/disease problems; (3) generally involve highly perishable crops; (4) allow relatively little margin for error and correction (5) do not lend themselves to continuous learning throughout the year; (6) usually require carrying key personnel through the off-season (thereby raising fixed costs); (7) tend to aim for short market windows that shift each season and may disappear with time; and (8) are prone to sudden and marked price changes caused by uneven supply in localized end-markets or intermediate distribution points.

Lack of know-how (product, market, technical and managerial) is the principal cause of failure in NTAE enterprises in LDCs. "Know-how", means both the acquisition of data, information, intelligence and technology, and its skillful application in the pursuit of business opportunities and the resolution of business problems. If the principal cause of failure in NTAE businesses is the lack of know-how, it also follows that a major thrust of development interventions should be to facilitate access to required know-how by NTAE entrepreneurs.

In the NTAE arena, each combination of crop, product form and end-market is a different business--a reality that development projects and institutions have often ignored. And in fact, at the enterprise level each deal (i.e. a combination of crop, product form, terms of sale, transport route and mode, receiver and end-market) is unique, a reality that inexperienced NTAE businesses too often ignore. NTAE enterprises do generally want and seek from their governments certain minimum business conditions: (1) a realistic exchange rate; (2) competitive wage and labor policies; (3) rapid access to required inputs at world market prices; and (4) farm-to-port infrastructure of acceptable cost and quality.

To be truly effective, a comprehensive development intervention aimed at helping to establish and expand the NTAE subsector requires that assistance be provided at three levels: macroeconomic policy and infrastructure, producer/exporter associations, and individual enterprises.

Lessons learned from PROEXAG indicate that desirable characteristics in NTAE Development Projects include:

(1) A commitment achieving a self-sustaining increase in export volume;
(2) A project built around the needs of enterprises, but with complementary efforts at improving the macroeconomic environment and strengthening producer/exporter and crop associations;
(3) A budget with the resources and flexibility to hire the best possible staff and consultants; and
(4) A positive approach that encourages experimentation, experiential learning and on-going re-design.

6.0 POST PROJECT MONITORING

As the NTAE support project (596-0108) led into the agricultural component of the EXITOS project (596-0165) and Chemonics won the contract, many of the normal close out procedures did not take place. Inventory was transferred to the EXITOS, the same relations with counterpart organizations remained intact, and virtually the same team and short term consultants remain the same. Separate project files were established, but many of the activities overlap.